IMPROVED OFDM RECEIVER WITH ITERATIVE CHANNEL ESTIMATION AND TURBO DECODING (MonPmPO1)

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Abstract :

Error correcting codes have become necessary in estimation and decoding techniques.wireless digital communications systems. Turbo codes are one of the most powerful types of error control codes currently available [1]. There is a tradeoff in turbo codes between latency and BER which depends on the choice of interleaver size, number of decoding iterations and the algorithm used in the decoding process. Therefore, particularly with turbo coding, the design of reduced−complexity receivers becames necessary for some appliations [2]. In this paper we propose a reduced−complexity OFDM receiver with joint iterative channel estimation and iterative decoding employing turbo coding. Improved performance of this receiver is observed in comparison with others current channel

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